

TK

To Public Service Board
RE: PROPOSALS FOR COMMENT
ON TEMPORARY Sound STANDARDS ON
INDUSTRIAL WIND PROJECTS.

HAVING SPENT A CONSIDERABLE AMOUNT OF TIME AROUND THE SHEFFIELD WIND PARK PROJECT, INCLUDING NUMEROUS VISITS TO THE THERIAN FAMILY RESIDENCE. I FEEL I HAVE A GOOD DEAL OF EXPERIENCE AND EXPERTISE CONCERNING NOISE ISSUES.

AS YOU ALREADY KNOW THE THERIANS MOVED OUT OF THEIR HOME ABOUT A YEAR AND A HALF AGO, DUE TO THE UNLIVABLE CONDITIONS REGARDING NOISE ISSUES. THEIR HOME LOCATION WAS LESS THAN 1 MILE FROM SEVERAL TURBINES, BUT DISTANCE IS ONLY ONE OF A NUMBER OF TANGIBLES THAT MUST BE factored INTO THE PROCESS WHEN CONSIDERING SOUND AND SITING STANDARDS. ANOTHER FACTOR IS LOCATION AT THE BASE OF THE HILLSIDE, WHEN DOWN WIND WITH THE BACK OF THE TURBINE NACEL IN LINE WITH PROXIMITY OF LOCATION, THE RESULTS CAN BE HIGH NOISE LEVELS THAT CAN GO ON FOR DAYS AT A TIME IF WIND PREDOMINATES IN SAME DIRECTION.

VERMONT PUBLIC
SERVICE BOARD
2016 JUN 27 AM 10 01

OTHER FORMS OF ATMOSPHERIC CONDITIONS
SUCH AS; CLOUD COVER, HEAVY AIR, HUMIDITY
LEVELS, SNOW AND ICE ON BLADES AND SEASONAL
FOLIAGE COVER, AS WELL CLEARING OF FOREST COVER
CAN COMPOUND NOISE PROBLEMS.

IN 2013 A NUMBER OF STRIP CUTS DOWN
THE MOUNTAIN WERE CARRIED OUT BY MEDAWERD
TIMBER, THE COMPANY LEASING THE LAND TO
THE PINSTWIND PROJECT, THESE CUTS REMOVED
ANY BUFFER BETWEEN THE THERIAN RESIDENCE
AND SEVERAL TURBINES AND WORSEND AN ALREADY
BAD SITUATION

ANOTHER VERY IMPORTANT FACTOR THAT HAS
BEEN OVERLOOKED IS TERRAIN, IT'S SHAPE AND
COMPOSITION. I HAVE TESTIFIED TO THE PSB
AND THE HOUSE NATURAL RESOURCE AND ENERGY
COMMITTEE NUMEROUS TIMES ON THIS VERY
SUBJECT. MOUNTAIN BASE RESEMBLING A
BOWL LIKE SHAPE TENDS TO TRAP AND FUNNEL
THE SOUND, DIRECTING IT DOWN TO A CONCENTRATED
AREA. I HAVE EXPERIENCED THIS EFFECT
NUMEROUS TIMES BELOW TURBINES #1 THROUGH #4
BELOW THE SHEFFIELD WIND PROJECT.
IT CAN HAVE A STENOSIS TYPE EFFECT,
LEDGE ALSO TRANSMITS THE SOUND,
WHEN SOME OR ALL OF THE FACTORS

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(I mentioned on page one), line up, you can stand near the Thenev's back door and hear the noise standing erect (I am about 5'11") I noticed the noise increased considerably when lowering my head to hip level. I think this is significant considering people sleep with their heads at a lower level (approx 18-20" above the floor). So placing a decibel meter at that level may expose different data than higher placed meters. Ledge and structure may also contribute to infrasound which I haven't mentioned but should be looked into. Solving unresolved noise issues on existing projects should be the first step to setting new standards, then we'll know what will actually work.

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LIST OF Noise Contributions

- : TERRIAN - (SHAPE AND COMPOSITION)
- : LOCATION AT BASE OF MOUNTAIN (REGARDLESS OF DISTANCE)
- : FRONT OF TURBINE FACING PREDOMINANT WIND
BACK OF NACEL IN LINE WITH DOWN WIND LOCATION
- : OTHER ATMOSPHERIC CONDITIONS
Cloud Cover, Humidity, Heavy Air, Snow and Ice Cover on BLADES OF TURBINES.
- : ABSENCE OF FOLIAGE BUFFER
DUE TO SEASONAL CHANGES OR LOGGING PRACTICES.
- : STRUCTURAL TRANSMISSION OF SOUND.
- : FAILING BEARINGS OR BRAKES ON TURBINES
- : TRANSFORMERS AND COOLING SYSTEMS AT BASES OF BACK TURBINES